

Massachusetts Institute of Technology  
Center for Space Research  
Cambridge, Massachusetts 02139

fax: 617-253-0861  
Room 37-621

thm@space.mit.edu  
617-253-5169

## Memorandum

To: Patricia Greer  
From: Thomas Markert, Principal Investigator  
Subject: Final Report on grant NAG 5-2230  
Supernova Remnant Rich Fields in the Carina Spiral Arm  
Date: November 21, 1994

My colleagues and I completed our analysis of the ROSAT PSPC data on five fields containing supernova remnants several months ago. One of us, Dr. Una Hwang, prepared a paper describing our results which was published last August ("An X-ray Study of Five Supernova Remnants in the Carina Spiral Arm", by Hwang and Markert, 1994, Ap. J., 431, p. 819). Hwang's earlier analysis of this data became part of her PhD thesis ("X-ray Studies of Supernova Remnants", February 1994, MIT). A copy of the Hwang and Markert paper is appended.

The results of our study are well-summarized in the Hwang and Markert paper: we obtained the best spatial-spectral X-ray study yet made of the intriguing SNR G296.1-0.7. This study showed interesting spectral variations over the surface of the object. We also determined the gross physical properties of G296 based on its X-ray emission. Four other fields were also examined. For three of these we determined upper limits to the radio object, and in one case found a weak, but statistically significant X-ray object coincident with the peak of the radio flux.

*Thomas Markert*

(NASA-CR-197219) SUPERNOVA REMNANT  
RICH FIELDS IN THE CARINA SPIRAL  
ARM Final Report (MIT) 1 p

N95-70351

Unclass

29/89 0030680